

A student works on a turbine engine as part of his studies in the Los Medanos College Electric & Industrial Technology program. (Photo by Los Medanos College Marketing Dept)

Workforce and Economic Development Annual Report

California Community Colleges Chancellor's Office Brice Harris, Chancellor



MAY 2013

CALIFORNIA COMMUNITY COLLEGES CHANCELLOR'S OFFICE

1102 Q STREET SACRAMENTO, CA 95811-6549 (916) 445-8752 http://www.ccco.edu



May 31, 2013

The Honorable Jerry Brown Governor of California California State Capitol Sacramento, CA 95814

Dear Governor Brown:

I am pleased to present the California Community Colleges Workforce and Economic Development program annual report for 2011-12.

As the United States climbs out of one of the worst economic downturns since the Great Depression, an overwhelming majority of Californians believe the most important issues facing the Golden State today are jobs and the economy.

The Workforce and Economic Development program invests in the skills of California's workforce. We are helping California's economic recovery by successfully responding to the state's workforce and business development needs.

As you know, California's community colleges train the workforce to fuel the state's economy. This report captures the highlights of our progress in the various components of the Workforce and Economic Development program, including short-term grants and 10 key strategic priority areas that address emerging areas and local project needs.

If you have questions regarding this annual report, please call Van Ton-Quinlivan, Vice Chancellor of the Workforce and Economic Development Division at (916) 327-5492 or vtquinlivan@ccco.edu.

Thank you for your interest in the Workforce and Economic Development program.

Sincerely,

Brice W. Harris,

WHamis

Chancellor

Workforce and Economic Development Executive Summary

California's community colleges are vital to the state's economy. The California Community Colleges system plays an important role in boosting the state's economy by serving more than 2.6 million students a year. In fact, one out of four community college students in the U.S. is enrolled in a California community college, making it the nation's largest system of higher education. The 112 community colleges provide students with the knowledge and background necessary in today's competitive job market. With a wide range of educational offerings, the colleges provide workforce training, basic skills courses in English and math, certificate and degree programs, and preparation for transfer to four-year colleges and universities.

The California Community Colleges Workforce and Economic Development program (WED program) helps students, incumbent workers, business partners and industries develop skilled competencies in critical industry sectors. As a source for developing and implementing training and curriculum, the WED program is instrumental in helping the community colleges respond to markets in a rapid and flexible manner. Workforce and Economic Development programs also grow local jobs by improving local business competitiveness and by training workers the skills they need to keep their jobs or to move to higher paying ones. The WED program is so effective at increasing local business activity, employment and worker income that state and local tax revenues exceed the cost of funding WED programs.

Table of Contents

Executive Summary Page 1

> **Background** Page 3

Methodology Page 4

Key Findings Page 5

Initiative Success Stories Page 10

> **Conclusion** Page 17

WED Program Advisory Committee Members Page 18

> Acknowledgments Page 21

Appendix Statewide Strategic **Priority Initiatives** Page 22

In fiscal year 2011-12, the WED program received \$22.9 million in funding, the same amount as the program received in the previous two Fiscal Years, which was roughly half of pre-recession levels. Though this budget represents less than one percent of the overall California Community Colleges system budget, the WED program proponents were able to provide more than \$42 million in matching resources. The success of the WED program is built on the continued support of the businesses, industries and college proponents.

This year's annual report to the Legislature highlights the continued relevance and support of the colleges to play an integral role in helping California build its workforce despite budget cuts and stagnant economic growth:

•	1.266	neonle	received	iohs
	1,200	DCODIC	ICCCIVCU	1000

- 17,422 jobs retained
- 3,382 businesses served
- 16,750 industry certifications
- 639 internships
- 172 apprenticeships

Success stories from each of the strategic priority areas are provided to showcase how the regional centers work well with their partners.

The WED program has a substantial role in the Chancellor's Office Workforce and Economic Development Division's two-year campaign **DOING What Matters™ for**

Significant Highlights during 2011-12		
Jobs		
People getting jobs	1266	
People keeping jobs	17,422	
Training		
People trained	35,694	
% Employees	42%	
% Entrepreneurs	21%	
% Students	37%	
Hours of training	229,395	
Technical Assistance		
People receiving technical assistance	43,209	
Organizations		
Number of organizations	3,531	
Number of businesses	3,382	
Number of Partnerships	315	
Number of Colleges	2,538	
Financial		
Business Impacts	110,321,557	
Match		

Jobs & the Economy. This effort will serve to align statewide resources and improve accountability. As a result, decision-making at the local, regional, and state levels will be better informed, students will receive relevant workforce training and education and larger workforce issues faced by industries will be more effectively addressed.

The California Community Colleges is the largest system of higher education in the nation, comprising 72 districts and 112 colleges serving 2.6 million students per year. Community colleges supply workforce training, basic skills education and prepare students for transfer to four-year institutions.

For more information about the WED program visit www.cccWED.net.

Background

The California Community Colleges Workforce and Economic Program was codified in statute in 1991. By this action, the Legislature formalized earlier efforts, dating back to 1986, to coordinate statewide technical training and programs for small business and economic development (Ed. Code §88500 et seq.). Partners in the WED program engaged in an extensive statewide strategic planning process that included contributions from community colleges, businesses, and workers.

In 1996, economic development became part of the statutory mission of the California Community Colleges (Ed. Code §66010.4(a)(3)). It was the intent of the Legislature that the program's capacity and mission be maximized to provide critical support for continuous workforce improvement and economic development that is adaptive and responsive to the changing needs of regional economies.

California Community Colleges Chancellor's Office

Vision:

Access to lifelong learning for all citizens and create a skilled, progressive workforce to advance the state's interests

WFD Mission:

We invest in California's economic growth and global competitiveness through industry-specific training and services that contribute to a highly skilled and productive workforce.

In 2012, the Legislature passed, and the Governor signed, SB 1402 (Lieu) (Stats.2012, Ch. 361) (Ed. Code §§88600, et seq.), which expressed the Legislature's intent to recast and rewrite the current WED program, which had a sunset date of January 1, 2013, and reauthorized the revised program until January 1, 2018.

In 2011-12, the WED program fostered 51 Regional Centers in 10 strategic priority areas that address emerging areas and local project needs in (See Appendix A for detailed descriptions):

- Advanced Manufacturing & Advanced Technology
- Advanced Transportation Technology & Energy
- California Biotechnology Initiative
- Business and Entrepreneurship
- Centers of Excellence
- Environment, Health, Safety & Homeland Security Training
- Health Workforce Initiative
- Centers for International Trade Development
- Interactive Internet & Mobile Applications for Business (formerly New Media & Entertainment Initiative)
- **Workplace Learning Resource Centers**

In conjunction with the Regional Centers, the WED program also supports short-term grant opportunities for emerging industries and regional projects.

Methodology

The data for this report was collected through both quantitative and qualitative methods. Financial and certain performance criteria were collected through online reporting systems. While qualitative data, such as success stories, were collected through the direct reporting to monitors, the WED Dean or Vice Chancellor, or at various meetings where WED Initiative activities were highlighted (Workforce and Economic Program Advisory Committee (EDPAC), Initiative Director's Meetings, Regional Consortia Meetings, etc.)

Quantitative Reporting

WED expenditures and performance data were collected online. With oversight by their WED grant monitors in the Chancellor's Office, Project Directors and Chief Business Officers reported and certified their budget and

expenditures quarterly in the

WED Online Expenditure System. Project Directors also provide a brief summary of quarterly activities. Before grants are closed, a report of their required match and any additional resources leveraged was also collected.

As with the Online Expenditure System, WED program performance data were collected online through the Data Collection System (DCS). This event-driven system collects information throughout the performance period of WED grants. Project Directors provided details about the people or businesses served, the types of training conducted, any curriculum developed, and what technical assistance was provided.

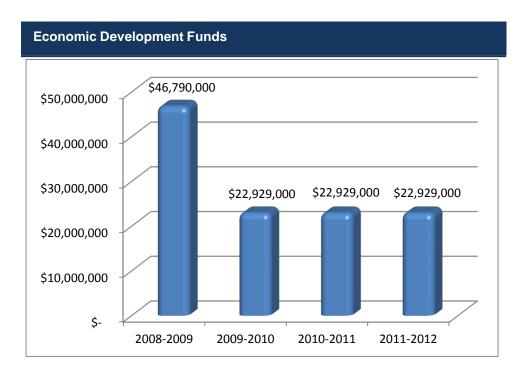
Qualitative Reporting

Beyond the qualitative data, the success of the program was demonstrated through those who have benefited by our efforts. Project directors highlight those instances that they are most proud of and inform WED staff, dean and the vice chancellor. These successes are then shared throughout the year with EDPAC, among initiative directors, and statewide through the Regional Consortia.

Key Findings

Adapting to Budget Reductions

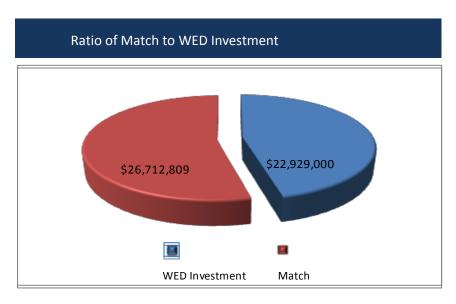
The recession continued to erode federal and state budgets; however, in 2011-12 the WED program budget was not further impacted. As the chart below illustrates, WED funding has remained flat at \$22,929,000 for the past three fiscal years, after being cut by fifty-two percent (52%) compared to the \$46,790,000 received in fiscal year 2008-2009.



The number of Regional Center projects in 2011-12 was 51, the same number as the fiscal year in which the number of Centers decreased from 108 to 51. Every Strategic Priority Initiative suffered a reduction in the number of regional centers.

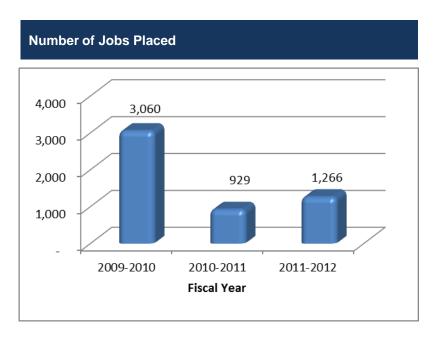
The total number of WED Industry Driven Regional Collaboratives (IDRCs) was reduced by more than half from 2009-10 (37) to 2010-11 (15). Through the dedication and resourcefulness of the community colleges in 2011-12 they were able to increase the IDRC projects from 15 to 19.

Despite these continuing challenges, the strong commitment of the colleges to the goals of economic development is reflected in their continued support of the program. Their ability to leverage funding to support their projects was on par with efforts in the 2010-11 fiscal year, with \$26,527,827 in matching resources contributed by donors in 2011-12.



Keeping Californians Employed

Regional Centers reported that more than 1,266 jobs were created or placed in 2011-12. Despite cutbacks in Regional Centers, and the resulting decrease in service capacity over the past three years, almost 17,500 people were able to retain their jobs with the help of the WED program.

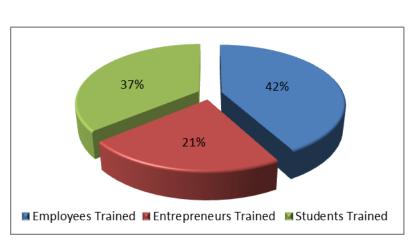


Regional Centers and short term grant programs have also yielded many internship, apprenticeship, and industry certification opportunities vital to students' professional growth and development.

Table 1: Employment Outcomes	
New Jobs	1,266
Retained Jobs	17,422
Internships	639
Apprenticeships	172
Industry Certifications	16,750

Responding to Training Needs

Through the WED program, 35,694 people were trained in fiscal year 2011-12. This includes 3,544 entrepreneurs, 20,886 employees and 44,984 students. Over 229,395 hours of training were provided.



People Trained

Adding Value to Business

The WED program also provides services and technical assistance to companies involved in small business and international trade. In 2011-12, the WED program served 3,528 organizations and 3,358 businesses. The Centers for International Trade Development Initiative reported \$26,527,827 in business value in sales, exports, imports and productivity.

Business Technical Assistance to Small Business in	
Management/Financing Practices Created	
Sales Increases	\$51,619,635
Loans Funded	\$22,239,000
Equity Investments	\$ 9,784,095
Business Technical Assistance in International Trade Created	
Increased Business Value (sales, exports/imports,	
productivity)	\$26,527,827
Total Completed Business Financial Transactions	\$110,321,557

Regional Centers and Industry-Driven Regional Collaboratives

The WED Regional Centers and Industry-Driven Regional Collaboratives (IDRC) projects play significant, but very different, roles in supporting the mission of economic and workforce development for community colleges. Where the centers are the long-term infrastructure of the WED program, the IDRCs are the flexible, responsive, short-term (one to two years) tool to develop new programs. Centers give the community college system the strength and stability to obtain additional resources such as endowments for nursing programs, facilities for advanced transportation and major pieces of equipment for manufacturers. To compliment these efforts, the IDRCs meet specific short-term industry needs and provide outreach to economically distressed areas. Centers and IDRCs are necessary for the WED program to remain effective and meet the needs of California's business, industry and workforce.

As shown in Table 3, in 2011-12 there were 51 Regional Center and 19 IDRC projects. The IDRCs received considerably less than half the funding that the Regional Centers received. The Regional Centers invested 7 percent of their funding in performance-based training, while the IDRCs invested 3 percent. IDRCs garnered nearly \$3 million in matching resources as compared to the Regional Centers \$22 million dollars in matching resources. The Regional Centers reported more than 19,998 contract education hours, while the IDRCs reported 740 contract education hours. The number of credit/noncredit hours reported were more than 16,051 for Regional Centers and 740 for IDRCs. Regional Centers served double the students (44,984) than employees (20,531). In contrast, the IDRCs also served more students (2,758) than employees (354). Both the Regional Centers and IDRCs served businesses, 3,575 and 110 respectively.

Table 3: Overall Comparison of Regional Centers and Industry-Driven Regional Collaboratives (IDRCs), 2011-12			
	Regional Centers	IDRCs	
Number of Centers and IDRCs	51	19	
Funding by category	\$10,384,403	\$3,257,143	
Total business and industry match by category	\$22,167,175	\$2,306,126	
Funds spent on performance-based training	\$ 769,513	\$ 113,389	
Business/industry match for performance-based training	\$ 1,502,159	\$ 160,563	
Number of contract education hours reported	36,695	740	
Number of credit ntract education hours reported	20,166	261	
Number of students served	42,467	2,758	
Number of employees served	20,531	354	
Number of businesses served	3,574	98	
Number of job placements reported	1,266	0	

The funding amounts and number of projects for the Regional Centers and IDRCs are displayed in Table 4. Regional Centers are disaggregated by strategic priority initiative (see Appendix A for details about the initiatives). IDRCs are grouped by industry type.

The IDRC projects for 2011-12 can be grouped into six areas:

- 1) Agriculture & Environment
- 2) Transportation & Energy
- 3) Healthcare
- 4) Manufacturing
- 5) Business & Entrepreneurship
- 6) International Trade

Projects such as water utility and ancillary agricultural fields such as agri-business, agri-manufacturing, agri-food safety are included in the Agriculture & Environment category. Transportation & Energy encompass projects related to green technology and transportation as well as renewable energy. Healthcare IDRCs focused on occupational training (pharmacy/phlebotomy/surgical technician, physical therapist assistant, para-educator companion assistant) and animal biotechnology. Manufacturing was fostered regionally through WED projects that included an advanced technology incubator, heavy and industrial equipment maintenance, construction, welding, and metal fabrication. Finally, some regions identified multi-industry needs and responded by either tailoring their IDRC project to incorporate a multi-Industry project or applied a single solution to multiple industries.

Table 4: Number of Regional Centers and IDRC Projects, 2011-2012			
WED Regional Centers	Funded Amount	Number of Projects	
Advanced Technolog y Transportation and Energy	\$1,435,000	7	
Applied Biotechnology	\$820,000	4	
Centers for Applied Competitive Technologies	\$1,230,000	6	
Centers for International Trade Development	\$1,025,000	5	
Centers of Excellence	\$820,000	4	
Environmental Training Centers	\$820,000	4	
Interactive Internet & Mobile Applications	\$615,000	3	
Health Workforce Initiative	\$954,403	5	
Business & Entrepreneurship Centers	\$1,435,000	7	
Workplace Learning Resource Centers	\$1,230,000	6	
Regional Centers Grand Total	\$10,384,403	51	
IDRC: Industry Type	Funded Amount	Number of Projects	
Agriculture & Environment	\$424,732	2	
Transportation & Energy	\$166,861	7	
Healthcare	\$376,519	2	
Manufacturing	\$587,918	2	
Faculty Entrepreneurship	\$160,207	1	
International Trade	\$388,691	2	
IDRC Grand Total	\$ 3,257,143	19	

Center for Applied Competitive Technologies (CACT)

El Camino College Center for Applied Competitive Technologies Develops Three Aerospace **Fastener Manufacturing Courses**



The El Camino College Center for Applied Competitive Technologies has developed three full-semester college courses in aerospace fastener manufacturing technology. This is the first fully accredited college program in the nation. "The Aerospace Fastener program continues to be a valuable resource for employers," said David Gonzales, Director of CACT. "Aerospace Fastener manufacturing is a critical skill-set for industry, yet no community college in the nation provides specific training in the technology. The

El Camino College Compton Center will offer three courses."

The Aerospace Fastener program has been designed to provide industry with entry-level people who gain hands-on training in basic machining, familiarity with blueprints, and have been exposed to fastener manufacturing theory. Despite the economic downturn, workforce industry demands have continued. It's estimated that hundreds of trained workers are needed over the next five years for the aerospace fastener industry. The uniqueness of the courses also requires highly specialized equipment, which industry donated to El Camino College Compton Center. The Industrial Fasteners Institute (IFI) and El Camino's CACT have teamed together to create this Fastener Industry program.

Comments received from industry employers underscore the significance of the work that California's community colleges perform:

"This is the start of a much-needed development of manufacturing talent, a critical sector to the economy of the South Bay and California as a whole."

Patrick Meade, manager of the IFI Aerospace Division

"The CACT has developed an outstanding training program for us with exceptional instructors. The participants have been thrilled with it, and the graduates are performing well. The product of these training classes will be the next generation Lockheed Martin employee."

Steve Haydu, Manager of Labor Relations, Lockheed Martin, Palmdale

With the CACT training program, the ski lift mechanics will know the whole system, which prepares them to keep equipment functioning safely and efficiently."

Kathy Hubbard, Deputy Director, California Ski Industry Association

Advanced Transportation Technology and Energy (ATTE)



Long Beach City College ATTE (LBCC ATTE) program hit a grand slam with its 40hour ISL G program in 2011-2012. This is the workhorse engine being used by many fleets to comply with Air Quality Management District (AQMD) rules 1190-1197, mandating the use of alternative fuels. Last year LBCC ATTE partnered with AQMD, Sempra Energy, and the Southern California Regional Transit Training Consortium

(SCRTTC) to provide each of these groups with over 20 complete sections of our ISL G program. SCRTTC has adopted this curriculum for all of its 39 transit agencies in Southern California and has identified LBCC ATTE as the lead training institution providing these classes. Other colleges and training instructors have taken the train-the-trainer course, providing additional capacity, but LBCC ATTE is considered the expert who, along with our test stand engine, have provided the most opportunities for technicians to obtain this highly desired training. Over 250 technicians from fleets all over California have attended this training through MEMA, the Maintenance Equipment Management Association of California. It is so popular that classes have to be added continuously to accommodate the special groups who want ALL of their techs to attend.

California Employment Training Panel Agreement – Energy Management Program **Training with the West Valley ATTE**

The California Employment Training Panel (ETP) reviewed the completion of the 2011 contract for implementation of the Energy Management Program. The ETP found West Valley's ATTE (WV ATTE) efforts on this project to be outstanding, especially due to successful recruitment of students, high number of students trained, and early completion of the program. The ETP has invited the WV ATTE to apply for a new round of funding to expand its training. The ATTE Hub will be assisting with the proposal development to obtain an ETP contract for up to \$750,000.

To implement this program, the WV ATTE proposes entering into an agreement to start an 18-month New Hire and Incumbent Worker training program. This training will target unemployed populations in the San Francisco and Monterey Bay Regions. Special focus will be placed on outreach to U.S. veterans returning from oversees who are in urgent need of updating their job skills in order to find immediate employment. Underemployed and Incumbent workers from private employers will be targeted in order to provide opportunities for increasing skills to help them to maintain employment and/or allow for upward mobility in their careers. Training for up to 400 incumbent workers and 200 new hires will be provided. In order to be most effective, the WV ATTE will contact employers to assess their needs and develop partnerships with those interested in receiving training.

California Applied Biotechnology Initiative (CalABC) – Biotechnology **Training & Education**



Advantageous Systems LLC (ADS) is a start-up medical device company that's incorporating nanotechnology and biotechnology to create a minimally invasive device for blood tests that won't rely on needles or pinpricks. The device also checks for blood glucose levels, HIV/AIDS, other bacterial infectious agents, and certain cancers and autoimmune diseases.

"It works with material," CEO Adam Stein explained. "The material goes through your skin without you even knowing it and it's able to latch onto things and test for bacterias, viruses and diseases." ADS works in units of nanometers. Stein put that in perspective by saying that one nanometer next to a human cell would be akin to the size of a human fist next to the Empire State Building. "We're pretty close to licensing," he said. "And we have a number of other products in the clean-tech area for water treatment applications. The collaborative is one of the best things in California. It got us going. It allows you to leverage equipment you'd otherwise have to buy." They figure the collaborative will ramp up over the next few years. "I think we'll get larger and help more companies," he said. "We'll end up with more companies in Pasadena. We have a company now that is looking for additional office space adjacent to us, so there is a growth mechanism here."

IIMA4BIZ Initiative – Interactive Internet & Mobile Applications for Business (formerly New Media and Entertainment (NMEI)

Seeds to Trees Academy Digital Media Technology



In partnership with the City of Santa Ana Public Library, Rancho Santiago CCD (RSCCD) designed a customized training curriculum to meet the Library's need of finding skilled technicians who could create videos for the City's cable channel and revamp their website to promote the abundant resources and activities provided to the entire community. Titled the Seeds to Trees Academy Digital Media Technology

Training, the proposal was awarded a grant from the Workforce Investment Act (WIA) Youth Council for a two-year period beginning in July 2011.

Tailored for at-risk youth between the ages of 16 and 20, the curriculum consisted of six specialized courses in video production, scriptwriting, digital music, website development, graphics design, and marketing. Participants met in the late afternoons and weekends to complete the courses taught by RSCCD faculty as well as industry experts dedicated to empowering youth to pursue careers in the media arts and 21st century technology.

Successes include the participants winning first place in the national competition of the Collaborative Summer Library Program (CSLP) Teen Video Challenge. The students' video promotes all that libraries have to offer, and secured a monetary award for the Santa Ana Public Library. In addition, 12 of the 20 participants secured apprenticeships working on video productions at the City's cable channel, while three were eventually hired on as part-time employees. The remainder of students continue to complete work experience projects with the City and are provided the mentorship and resources needed for successful job placement before the end of the grant period.

Business and Entrepreneurship Centers (BEC)

(Formerly Small Business Development Centers (SBDC))

Business and Science Majors Receive Award in Biotech Competition



Frustration is what changed Nick Sullivan from biochemistry student to chief executive officer of his own company.

While working at a Cal Poly, Pomona, lab last summer, he was tasked with transferring worms to different sets of petri dishes. Sullivan was disappointed that his petri dishes were easily contaminated with bacteria and resolved to fix the problem. He tinkered with a few ideas until he found a solution: a portable

device that blows sterile air onto workstations. By the end of summer, Sullivan successfully avoided contamination of his petri dishes. Sullivan's creation was so well-received that he decided to take the next step. He collaborated with graduate science student Paul Stein and business majors Misael Hernandez and Leslie Martinez to enter his product – Accommodair – into the Idea to Project (I2P) competition, an event organized by the CSU Biotechnology Symposium. The group competed in late January, earned second place and received a \$2,000 cash award. Most importantly, they gained the attention of judges and attendees. "They showered us with praise for 10 minutes after our presentation," said Sullivan, who was approached by judges and competitors interested in buying the product.

Sullivan, Stein, Hernandez and Martinez are now kicking their goal into high gear to turn the device into a real product backed by a company they established — Abiotic Technologies Inc. The group will use the prize money to spur production of Accommodair models by the end of winter quarter and Sullivan has already filed a patent for his device. The team members are tapping into their skill sets and taking on various roles to make the startup a success.

Prior to the competition, Sullivan and Stein had never met Hernandez and Martinez. "The reality of startups today is that it takes more than one person and more than one field of study to succeed." "As business majors, we need to look outside of the box," says Hernandez, who is also president of Enactus, an entrepreneurship club. "We need to collaborate with the engineers and the biotech people because they are making things that we would never think of." College is one of the few times in our lives when we have access to so many resources and different types of people."

Centers of Excellence (COE)

Science, Technology, Engineering, and Math (STEM)



STEM in 20 is a COE research and planning project in collaboration with the Institute for the Future to take explorative look at industry innovations affecting workforce trends in the next 20 years, focusing on science, technology, engineering and mathematics. The STEM in 20 project was developed to assist community colleges and K-12 partners discuss workforce trends with students from a unique perspective more than 20 years into our future, what innovations and trends will have become mainstream? In addition, where is it likely that advances in science and technology

will create new products, new paradigms and new job opportunities?

Smart Grid is a modernized electricity infrastructure, which integrates advanced communications and control systems to create a highly automated, responsive and resilient power delivery system that will both optimize service and empower consumers to make informed energy decisions. The innovation is overlaying advanced information and communications technologies onto the existing power grid to create an electricity + information (E+I) infrastructure or "smart grid" that delivers electricity with the capability for two-way communications between suppliers and consumers.

Source: PG&E Smart Grid Deployment Plan 2011-2020.

Environment, Health, Safety and Homeland Security Training (ETC)

Environmental Training Center Prepares Companies to Handle Nanotechnology Environmental and Human Safety Impacts



The National Nanotechnology Initiative (NNI), a federal interagency research and development program studies the imaging, measuring, modeling, and manipulation of matter at the nanoscale—a measurement of particles between 1 and 100 nanometers (1 billionth of a meter) in size. While nanoscale materials are found in nature as part of smoke, volcanic ash, and sea spray, the advancement of microscopic magnification has allowed scientists to understand the new properties

of matter that occur at the nano level. This burgeoning area of science, with potential applications in electronics, computing, alternative energy, food, and medicine brings with it a significant need for companies to understand the safe use of these materials.

Part of the NNI budget is dedicated to studying the environmental, health and safety (EHS) exposure to, and implications and use of, nanomaterials. Federal research is ongoing, and as companies adopt the use of nanomaterials in various development or manufacturing processes, having a framework for risk management will be a critical component of their successful use.

"The nanotechnology field is expected to grow to \$2.5 trillion globally over the next four years and has the potential to create thousands of jobs in California by 2015," said ETC Statewide Director Richard Della Valle. "This upcoming workshop is led by two well respected industry experts, and provides a critical foundation of knowledge for those professionals with safety and health responsibilities in facilities where nanomaterials are handled now, or may be handled in the future."

Health Workforce Initiative (HWI)

Formerly Regional Health Occupations Resource Centers (RHORC)

Health Information Technology; Electronic Health Records



Mike Brand, one of Santa Barbara City College's first graduates in the Health IT Workforce Training Program was willing to share how he translated his skills in technical project management as a TV Editor and Post Production Specialist, to the Health Information Technology field. Mike registered for the first electronic health records (E.H.R.) classes offered at Santa Barbara City College. The timing was perfect. The course was 100% online. He stated "I was surprised how well prepared I

felt at the conclusion of the training. He applied and was accepted into a fellowship through Health Career Connection in California. He was placed at the UCLA Venice Family Clinic and was there for two Go Lives. Three months later, he was their E.H.R. Trainer. Not long after, he was recruited as a consultant by Object Health, where he is currently working. He handles over 30 practices and clinics. All this was achieved within one year! Mike also spoke at the HIMSS Conference in Las Vegas on the topic of his transition from television to HIT.

Linda Ogren - Trainer for Phoenix House

I entered the HI-TECH Program at East Los Angeles College (ELAC) in September of 2010 as a student in the first cohort. Prior to finishing this six-month course, ELAC arranged for vendors to come to the campus to talk to students and have preliminary interviews and I was offered a job with one of the vendors. Initially, I worked part-time for the vendor as the contact for HITEC-LA, assisting medical providers to implement Electronic Health Records (EHR) systems and achieve Meaningful Use. I later became a full-time employee and was promoted to Director/Project Manager for a contract from Cal-Optima Regional Extension Center (COREC) to assist primary care providers with the same kind of support as a REC Service Provider.

I recently accepted a new position with a national drug and rehabilitation facility as their EHR Trainer for the state of California, servicing 14 sites. My opportunities continue to expand, as do my responsibilities and compensation. Without the HI-TECH program, I would have had a very difficult time trying to find employment after running my own company. I was facing a mid-life career change and needed to upgrade my skills. The HI-TECH program and the staff administering the ELAC program were key in my success since completing the training.

Centers for International Trade Development (CITD)



Bend, Oregon-based DENT Instruments designs and manufactures power meters and energy recorders for today's energy professionals. Our products are often the first step in developing strong energy strategies and lowering operating costs.

After exhibiting in the U.S. Pavilion at Eco Asia 2011 in Hong Kong via the El Camino College CITD Green Export Enabler Program (GEEP), DENT Instruments received new

orders for PowerScout meters which topped \$10,000 with larger potential for more building submetering in Singapore.

DENT's PowerScout™ series power meters are single and multi-point 3-phase submeters that are compatible with either BACnet or Modbus communications protocols. They were designed to provide timely and accurate consumption data necessary to gain the upper hand on electrical costs in today's escalating energy market. These meters can capture kWh/kW energy and demand data as well as virtually all relevant energy parameters for diagnostics and monitoring. The PowerScout series instruments have earned a solid reputation among energy professionals as rugged and reliable power meters for single and three phase submetering projects.

Learn more about DENT Instruments and the products they have to offer on their website: www.DENTinstruments.com.

Workplace Learning Resource Center

Leadership Program Helps Close the Gap



Today, more than ever, businesses need strong leaders to ensure their future success; however, finding employees with these skills is often very difficult. Recognizing the need for strong leaders and wanting to ensure community college students were prepared to fill future leadership and management roles, Linda Waring, the Director of the San Diego Imperial County Workplace Learning Resource Center began talking with employers,

students, and other experts in the area of leadership. Her goal was to learn as much as should could about the needs of business and what skills employees were missing.

This collaboration resulted in the development of the Community College Leadership Academy (CCLA). Based on Ken Blanchard's award-winning "Situational Self Leadership" (SSL) program, the CCLA is the first of its kind developed for community college students. The program integrates the key concepts from the SSL program with the needs of community college students. The program is comprised of eight modules and provides strategies for becoming a strong, responsible, and solution-driven leader.

To date, the CCLA has been delivered to 75 students and 20 faculty members throughout the San Diego region. To watch a video of, and hear from the participants, in the Community College Leadership Academy, go to: http://wplrc.com/community-college-leaders.

Conclusion

While the WED program in 2011-12 faced yet another year of stagnant budgets, California's community colleges continued to go above and beyond in their dedication to their students and communties. The capacity of the WED program continues to be extended through the colleges that participate in the program as Non-Financial Affiliate Centers. It is these partners who understand and appreciate that the WED program is a means to serving their regional economic workforce employment needs. Economists have pointed to signs that a recovery is in the works nationally, albeit slowly in California. Nonetheless, the California Community Colleges' Economic & Workforce Development Program will continue to strive to help the state's economy and its communities by continuing to produce a well trained, motivated, and enthusiastic workforce.

DOING What Matters [™] for Jobs & the Economy •1A. Consider labor •2. Retool programs that are market needs when not working or not meeting a making local decisions: labor market need so that budgets, programs, students can study what course offerings. matters. **GIVE PRIORITY** MAKE ROOM •1B. Decide on to what for what program capacity matters to jobs matters to jobs as a region. & the economy & the economy GOALS INNOVATE 1 **STUDENT** what matters SUCCESS to jobs & the matters to jobs •3A. Adopt common metrics •4. Solve a complex economy & the economy and skills panels in CCCCO workforce training RFAs. need so that our system •3B. Strengthen regions with can better deliver for four skillsets: data mining, employers and sectors. convening, technology, and curriculum approval

We look forward to embracing the challenge to develop, sustain and advance California's economic growth and global competitiveness.

California Community Colleges Workforce and Economic Development Advisory Committee

Dr. Patrick Ainsworth

Assistant Superintendent and Director, High School Leadership Division Department of Education Department of Education Representative

Mr. Bruce Baron

San Bernardino Community College Chancellor College CEO Representative, Region 9

Ms. Yolanda Benson - Co-Chair, Networks & Legislation Subcommittee

Government Strategies

Ms. Russia Chavis

Deputy Secretary for Housing and Real Estate Business, Transportation and Housing Agency BTH Representative

Mr. John Chocholak

Small Manufacturers' Institute, Northern California Representative Business/Industry Representative - Chancellor's Appointee

Mr. Jeff A. Cummings

College of the Redwoods, Dean of Career & Technical Education CCCAOE Liaison

Dr. Dennis Gervin

Columbia College, President College CEO Representative, Region 5

Dr. Douglas B. Houston

Yuba Community College Chancellor College CEO Representative, North Region 2 Term 1 ends Fall 2012

Dr. Patricia Hsieh Chair - Advisory Committee Chair, Strategic Review & Advance Subcommittee

San Diego Miramar College President College CEO Representative, Region 10

Dr. Debra Jones

Dean, Career Education Practices Unit Workforce & Economic Development Division CCC Chancellor's Office

Ms. Laurel Jones

Mission College President College CEO Representative, Region 3

Mr. Jerry Levine

Chair Emeritus, U.S. Export Council International Trade Representative

Dr. Erlinda Martinez

Santa Ana College President College CEO Representative, Region 8

Mr. Brian McMahon

Executive Director California Employment Training Panel ETP Representative

Mr. Marty Mechsner

General Manager Industrial Metal Supply Company Business/Industry Representative-Chancellor's Appointee

Ms. Lupe Mercado

Executive Vice President Communications Workers of America, Local 9421 Labor Representative

Mr. Wheeler North

Academic Senate San Diego Miramar College Academic Senate Representative

Dr. Jessica Pitt

Coordinator, Bay Area Workforce Funding Collaborative Foundation Representative

Senator Richard Polanco (Ret.)

Chairperson of the CA Latino Caucus Institute

Mr. Ken Quesada

California Workplace Investment Board CA Workforce Investment Board Representative

Mr. Tim Rainey

Executive Director California Workforce Investment Board CA Workforce Investment Board Representative

Ms. Laura Ramirez

East Los Angeles College, Dean, Career and Technical Education Region 7

Mr. Henry Ramos

California Community Colleges Board of Governors Board of Governors Representative

Ms. Marlene Ruiz

Director of Education and Consulting Kaiser-Permanente Business/Industry Representative-Chancellor's Appointee

Gurbax Sahota

President & CEO California Association for Local Economic Development CALED Representative

Mr. Phil Smith

ASCCC Representative at Large, Mathematics American River Academic Senate Representative

Ms. Van Ton-Quinlivan

Vice Chancellor, Workforce & Economic Development Division California Community Colleges Chancellor's Office

Mr. Cody Joe Torre

Student Senate for the California Community Colleges, Orange Coast Student Representative

Dr. Dianne G. Van Hook

College of the Canyons Chancellor College CEO Representative, Region 6 South Central Coast

Mr. Jeffrey Williamson

Director, International Trade Development Workforce and Economic Program Initiative Director Representative Term 4 ends Fall 2012

Mr. Spencer Wong

Deputy Chief, Labor Market Information California Employment Development Department

Vacancies: Classified Employee CEO Representative, Region 7, 4, 1

Acknowledgements

Chancellor Brice W. Harris would like to acknowledge and thank those individuals who have made significant contributions to this report.

California Community Colleges Chancellor's Office

Erik Skinner

Executive Vice Chancellor **Programs**

Van Ton-Quinlivan

Vice Chancellor Workforce and Economic Development

Helga Martin

CC Program Assistant II Workforce and Economic Development

Erin Larson

Specialist **Industry Partnership Practices**

Jeannine Clemons

Digital Composition Specialist II Workforce and Economic Development

Paul Feist

Vice Chancellor of Communications

Office of Communications

WED Program Initiative Directors and Project Directors

Appendix

Statewide Strategic Priority Initiatives

There are 10 Statewide Strategic Priority Initiative areas for which the WED program provides a variety of solutions for business development and workforce training needs. Services for these initiatives are provided through the WED program Regional Centers.

- Advanced Manufacturing & Advanced Technology
- Advanced Transportation Technology & Energy
- California Biotechnology Initiative
- Business and Entrepreneurship (formerly the Small Business Development Program)
- Centers of Excellence
- Environment, Health, Safety & Homeland Security Training
- Health Workforce Initiative
- Centers for International Trade Development
- Initiative-Interactive Internet & Mobile Applications for Business (formerly New Media & Entertainment Initiative)
- Workplace Learning Resource Centers

Advanced Manufacturing and Advanced Technology - www.makingitincalifornia.com



- Develops Workforce skills in advanced technology
- **Improves** Advanced management and manufacturing processes
- Accesses New manufacturing technologies

California Centers for Applied Competitive Technologies (CACT) are dedicated to serving California's advanced manufacturing and advanced technology companies

with innovative solutions that are unique and customized to your business. Our grant programs and leveraged partnerships allow us to offer the most cost-effective workforce training and consultative services for California advanced technology businesses. We have the same goals as California businesses—when you succeed, we succeed.

- A better return on your workforce investment
- Our experts make it easy for you
- Greater profitability and improved quality
- Increased productivity and reduced waste
- College approved curriculum and excellent training expertise
- Unbiased professional evaluation
- Access to advanced technology
- Competitive pricing due to leveraged public sector funding
- High performance employees
- Improved employee safety and reduced hazards

Statewide Director: José Anaya

Advanced Transportation Technology & Energy - www.attecolleges.org



- Responds to California's Environmental Challenges
- **Creates** Transportation and Energy Training and Curriculum
- Transforms through Innovations in New Technologies

The Advanced Transportation Technology & Energy (ATTE) was created as a means for keeping California competitive as a national leader in advanced transportation and energy related technologies. Its ultimate goal is to transform the California workforce into a technologically superior green workforce serving the rapidly developing technology-driven transportation and energy industries. Areas of emphasis include emerging transportation technology training, emerging energy technology training, the development of effective energy management plans, and the efficient utilization of energy and energy management resources.

Our transportation and energy technology and related technical education, assistance and outreach programs are tailored to the needs of regional employers and employees in California.

We provide students, technicians, faculty, public and other initiative centers with the education, training and resources they need to learn effectively, teach and work with advanced transportation and energy technologies.

Statewide Director: Peter Davis **Project Monitor:** Katie Gilks

California Biotechnology Initiative – Biotech Training & Education - www.cccbiotech.org



- Collaborates Connecting Community Colleges with Industry Needs
- Facilitates Program Development and Customized Training
- Initiates Students and Biotech Professionals

WED's Biotechnology Centers specifically serve the workforce needs of the biotechnology and biosciences communities in California. The statewide and regional directors of the CalABC program partner with local and regional industry professionals to design skill-based instruction for employer needs; provide employees for both established and start-up bioscience companies, including bioscience company incubators; work with legislative, governmental and economic development agencies regarding the bioscience workforce; and partner with biotechnology industry organizations on workforce issues. Emphasis is placed on biotech skills training and education, biology research and bioscience manufacturing.

Statewide Director: Jeffery O'Neal **Project Monitor**: Rita Levy

Business & Entrepreneurship Center¹ - www.cccWED.net/initiative business entrepreneurship.cfm



Strengthen. Assist. Expand.

- Generates Jobs
- **Provides** Economic opportunity and flexibility
- **Boosts** Economic output

Small businesses are an essential part of California's economy. The SBDC Centers generate jobs, provide economic opportunity and flexibility, and

boost economic output. California is home to 2.6 million small businesses, including the self-employed. More than 7.5 million people, or half of the state's employment is in small business. In a recent study, ninety-eight percent (98%) of all California businesses have fewer than five employees.

The purpose of the Small Business Development Center Initiative is to grow California business through the delivery of one-on-one counseling, seminars, workshops, conferences and other technical activities. These services contribute to the success of existing business and foster the growth of new business and jobs. Small business services include management, marketing, financing, accounting, strategic planning, regulation, taxation, capital formation, procurement, human resource management, production, operations, agribusiness, computer applications, limited business law assistance, office automation, site selection and many more areas of small business assistance. This initiative is part of a national program and is a partnership with higher education, state and federal agencies and allows the California Community Colleges' participation in the national SBDC system and can be partnered with the Small Business Administration program at a local level.

Statewide Director: Michael Roessler

Centers of Excellence - www.coeccc.net



- Inform through real-time regional and local labor market research and data validated by industry partners.
- Connect business and industry with community colleges, and workforce and economic development professionals who are committed to developing an outstanding workforce.
- **Advance** the economic and workforce development mission of California's

community colleges in partnering with business and industry and preparing the workforce to succeed.

WED's Centers of Excellence support business and industry through its nationally recognized industry reports. The regional and local labor market research and data is validated directly by California business and industry. Our environmental scans and customized reports are used by business and industry to access current, relevant labor market information about wages, career ladders and the offerings currently provided by community colleges.

Statewide Director: Elaine Gaertner **Project Monitor**: Erin Larsen

¹ The SBDC Program of WED was restructured and is currently known as the Business and Entrepreneurship Centers.

Environment, Health, Safety and Homeland Security Training - www.envtraining.org



- **Delivers** Onsite Training and Education
- **Conducts** Compliance Audits
- Maximizes Health and Safety

California's environment, health, safety, and homeland security initiatives all benefit from the workforce training provided by our Environmental Training Centers (ETC). They also assist small-to-medium-sized businesses with federal and California state compliance issues related to our environment, health, safety and homeland security. Based upon the needs of your business, ETC offers low-cost or free technical assistance.

The assistance that the ETCs provide is designed to help businesses comply with, and mitigate the impact of, regulations pertaining to our environment, health, safety, and homeland security. We collaborate with Professional Associations, Cal-EPA, Federal EPA, FEMA, OES, Department of Health and many other federal and state agencies to provide this training.

Statewide Director: Richard Della Valle **Project Monitor**: Katie Gilks

Health Workforce Initiative² - www.ca-hwi.org



- **Expands** California's Vital Health Care Workforce
- Trains Health Care Job Analysis and Curriculum Development
- Partners Solving Challenges in Health Care

Health Workforce Initiative Health care continues to be one of the fastest growing industries in California and faces unprecedented challenges to its delivery systems. Our Health Workforce Initiative Centers identify the workforce needs of California's health care delivery systems and develop solutions through a comprehensive problem-solving process that includes assessment and analysis, planning and development, and implementation and evaluation. We provide education and training programs to meet emerging demands for California's health care industry workers; to determine needs, facilitate development of innovative solutions and to locate resources to implement planned responses; to evaluate and initialize health-related educational programs.

Statewide Director: Linda Zorn Project Monitor: Brenda Fong

² Formerly the Regional Health Occupation Resource Centers (RHORC)

Centers for International Trade Development (CITD) - www.citd.org



- **Deliver** Export and Import Programs
- Inform Transaction & Regulatory Assistance
- **Expand** International Marketing Opportunities & Resources

The Centers of International Trade Development (CITD) has 14 offices across California and assists thousands of companies annually in conducting international business. Our free or low-cost programs and services include one-on-one technical assistance and consulting, market research, training and educational programs, trade leads and special events.

The CITD is a place to learn about international matchmaking events and other programs taking place both in California and abroad. Let us help you succeed:

- Individualized assistance as an exporter, importer, or global marketing organization
- Export and import education programs for businesses and entrepreneurs
- "Help Desk" to ask questions about international trade and help solve international business transaction challenges

Statewide Director: Jeff Williamson



Interactive Internet & Mobile Applications For Business (IIMA4BIZ)³www.iima4biz.org

- **Builds** Business and Education Communication
- Accesses Industry Labor Market Needs
- **Delivers** Emerging and Re-entry Workforce Training

The Interactive Internet & Mobile Applications For Business is a statewide network of Community College educators working in strategic partnerships with businesses, industry and community organizations to identify and meet California's workforce and economic development needs in the areas of digital arts and new media applications.

Consisting of a statewide initiative director, regional centers and affiliated colleges, IIMA4BIZ is committed to identifying and specifying training experiences that develop artistic communications skills and technological expertise to meet California's workforce needs involving multimedia, entertainment, interactive web and new media skill sets.

The IIMA4BIZ initiative also is dedicated to support the growing needs of small and medium business that are compelled to adopt new media applications which enable better marketing, customer service, productivity and collaboration.

Our curriculum and contract learning products cover the application of digital arts to new media, multimedia and entertainment. They span topics from hands on classroom software training to community outreach and online seminars covering the business adoption, management and legal concerns of new media applications.

Statewide Director: Steven Wright

Workplace Learning Resource Centers (WpLRC) - www.wplrc.org



- **Upgrade** Onsite Workforce Skills Instruction
- Enhance Job Retention, Career Readiness and Career Advancement
 - Improve Productivity through Basic Workforce Skills Training

The Workplace Learning Resource Centers (WpLRC) is a statewide Workforce and Economic Program that provides business and industry with customized training and education solutions. The goal is to improve workplace skills, assist in workforce preparation, and foster work readiness and career readiness.

We specialize in basic skills, math, occupational skills assessment, vocational English as a Second Language (ESL) and basic mathematics training programs and services to ensure California's workforce has the skills necessary to be successful and that employers have the highly trained and productive workforce they need to compete.

The WpLRC is a network of 12 centers across California that develops and implements innovative, effective, responsive and affordable training solutions that include customized training for the individual customer and certificate training in such areas as customer service, generational diversity and basic skills in the green economy. The centers serve public entities, private businesses, non-profits and workforce development organizations.

The WpLRC also provide services to community colleges through faculty in-service training, technical assistance, curriculum contextualization and ESL course integration for colleges, by partnering with individual colleges, Career Technical Education, the Basic Skills Initiative and the Academic Senate.

Statewide Director: Bruce Whistler **Project Monitor**: Katie Gilks

³ Formerly the New Media & Entertainment Initiative (NMEI)

